

June 20, 2011

Navy's Optimization Report - Key recommendations:

- DEC ROD
1. It is necessary to contain and reduce the hot spot in the OU-3 (eastern) plume;
 2. Two options are provided for containing the OU-3 plume,
 - (a) Using new extraction wells upgradient of the Bethpage public supply wells to capture a substantial portion of the hotspot;
 - (b) Supplement the ongoing capture in the Bethpage public supply wells with new extraction wells to prevent the hot spot from migrating further downgradient.

7 USGS Rept, ch. Funded by EPA

3. The existing groundwater models have inadequacies, but they can still be used for some purposes if they are improved. For instance, the report says that the models most likely won't be able to predict plume arrival times at water supply wells, due to the large and complex plume. However, a well-constructed and calibrated model can be useful in evaluating capture zones of public supply wells, to help determine the effectiveness of source containment, and to design alternatives for capturing the OU-3 hotspot noted in #1, above. The Optimization Report gives recommendations for improving the models so that they can be useful in some instances.

- branner disagrees w/p. 9 (well 19 vs. new well 21) ← Eval of a diff Remedy
4. Additional data needs to be collected with vertical profile borings and multi-level monitoring wells in order to get a better picture of the contamination. This will help to better evaluate the containment of sources by the on-site containment system; to better evaluate contributions to the plume from other commercial properties; to better understand the eastern, western, and southern (leading edge) boundaries of the plume; and to better monitor the plume's progress beyond the leading edge.



5. An evaluation should be done of the technical and economic feasibility of plume containment at its leading edge, and of other alternatives, such as installing treatment plants in the future at currently un-impacted public water supply wells.
6. A comprehensive conceptual site model needs to be developed based on an analysis of all the information from both the OU-2 (western) and OU-3 (eastern) plume. This model needs to be kept updated and used as a dynamic tool to guide each successive monitoring, modeling, and treatment step.